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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,499	09/30/2003	Theodore C. Tanner JR.	MS1-1349US	8575
22801	7590	07/22/2010		
LEE & HAYES, PLLC 601 W. RIVERSIDE AVENUE SUITE 1400 SPOKANE, WA 99201			EXAMINER GELAGAY, SHEWAYE	
			ART UNIT 2437	PAPER NUMBER
			NOTIFICATION DATE 07/22/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/676,499	<b>Applicant(s)</b> TANNER ET AL.	
	<b>Examiner</b> SHEWAYE GELAGAY	<b>Art Unit</b> 2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,11-22 and 46-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9, 11-22 and 46-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is in response to the Amendment filed on 03/31/10.
2. Claims 9, 47, 50 and 53 have been amended.
3. Claims 1, 3-9, 11-22 and 46-54 are pending.

### ***Response to Arguments***

4. Applicant's arguments filed on 03/31/10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

5. Claim 8 is objected to because of the following informalities: It is not clear whether the claim is independent or dependent. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1, 3-7, 46, 49 and 52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1, 3-7, 46, 49 and 52 recite "a computer-readable storage medium" wherein the computer-readable storage medium is not explicitly defined to be limited to the statutory subject matter. Therefore, claims 1, 3-7, 46, 49 and 52 read in light of the specification includes a non-statutory subject matter.

### ***Claim Rejections - 35 USC § 103***

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8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 4-9, 12-18, 20-22 and 48-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lenoir et al. (hereinafter Lenoir) US 6,671,806 in view of Cox et al. "Some general methods for tampering with watermarks" IEEE , 1998, pages 1-15.

As per claims 1, 8-9 and 16-17:

Lenoir teaches observing and determining a location in a processor-readable memory of a computer, where a dynamic embedded-signal detection program module ("watermark detector") receives a subject input stream for the watermark detector to perform detection thereon to determine if the stream has an embedded-signal therein. (col. 1, lines 55-65; col.4, lines 2-18)

Lenoir does not explicitly disclose intervening with clear reception of the subject input stream, thereby hindering watermark detection by the watermark detector. Cox in analogous art, however, teaches intervening with clear reception of the subject input stream, thereby hindering detection by the detector. (5. Signal Transformation; 6. Intentional Attack) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Lenoir with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

As per claim 18:

The combination of Lenoir and Cox teaches all the subject matter as discussed above. In addition, Lenoir further teaches wherein the watermark-detector detector is further configured to detect and observe the watermark detector in a processor-readable memory of a computer to determine its location in such memory. (col. 1, lines 55-65; col.4, lines 2-18)

As per claims 3, 11 and 19:

The combination of Lenoir and Cox teaches all the subject matter as discussed above. In addition Cox further teaches wherein the intervening comprises adjusting "play-rate" of the incoming stream. (5. Signal Transformation; 6. Intentional Attack)

As per claim 4-5, 12-13 and 20:

The combination of Lenoir and Cox teaches all the subject matter as discussed above. In addition, Cox further discloses wherein the intervening comprises introducing a countersignal into the incoming stream. (5. Signal Transformation; 6. Intentional Attack)

As per claim 6, 14 and 21:

The combination of Lenoir and Cox teaches all the subject matter as discussed above. In addition Cox further teaches maintaining the intervening while the input stream is being consumed. (5. Signal Transformation; 6. Intentional Attack)

As per claims 7, 15 and 22:

The combination of Lenoir and Cox teaches all the subject matter as discussed above. In addition Cox further teaches wherein the type of the subject input stream is selected from a group consisting of image, audio, video, multimedia, software,

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metadata, and data. (5. Signal Transformation; 6. Intentional Attack)

As per claims 52:

Lenoir teaches a method of facilitating circumvention of dynamic, robust, embedded-signal detection, the method comprising: determining where, in memory, a dynamic embedded-signal detection program module ("dynamic detector") in a processor-readable memory of a computer configured to dynamically detect watermarks in an input stream, based upon the observing the dynamic detector receives a subject incoming stream for the dynamic detector to perform embedded-signal detection thereon to determine if the subject incoming stream has an embedded-signal therein. (col. 1, lines 55-65; col.4, lines 2-18)

Lenoir does not explicitly disclose intervening with clear reception of the subject incoming stream, thereby hindering embedded-signal detection by the dynamic detector, wherein the intervening comprises adjusting "consumption-rate" of the incoming stream. Cox in analogous art, however, teaches intervening with clear reception of the subject incoming stream, thereby hindering embedded-signal detection by the dynamic detector, maintaining the intervening while the subject input stream is being played. (5. Signal Transformation and 6. Intentional attacks) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Lenoir with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

As per claims 48:

Lenoir teaches a system for facilitating circumvention of dynamic, robust, embedded-signal detection, the system comprising: a memory-location determiner ("watermark-detector detector") configured to determine where, in a memory, an embedded-signal detection program module ("detector") receives a subject input stream for the detector to perform detection thereon to determine if the subject input stream has an embedded-signal therein and further configured to detect and observe the detector in a processor-readable memory of a computer to determine its location in such memory. (col. 1, lines 55-65; col.4, lines 2-18)

Lenoir fails to explicitly disclose an intervener configured to intervene with clear reception of the subject input stream, thereby hindering detection by the detector, wherein the intervening comprises adjusting the incoming rate for the input stream. Cox in analogous art, however, teaches an intervener configured to intervene with clear reception of the subject input stream, thereby hindering detection by the detector, wherein the intervening comprises adjusting the incoming rate for the input stream. (5. Signal Transformation and 6. Intentional attacks) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Lenoir with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

As per claims 49 and 50-51:

Lenoir teaches a computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs a method for facilitating circumvention of watermark detection, the method comprising: determining

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where, in a memory, a dynamic watermark detection program module ("watermark detector") receives a subject input stream for the watermark detector to perform watermark detection thereon to determine if the subject input stream has an embedded-signal therein; observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. (col. 1, lines 55-65; col.4, lines 2-18)

Lenoir fails to explicitly disclose intervening with clear reception of the subject input stream, thereby hindering watermark detection by the watermark detector, wherein the intervening comprises introducing a countersignal, the countersignal modifying the reception by introducing a noise countersignal. Cox in analogous art, however, teaches intervening with clear reception of the subject input stream, thereby hindering watermark detection by the watermark detector, wherein the intervening comprises introducing a countersignal, the countersignal modifying the reception by introducing a noise countersignal. (5. Signal Transformation and 6. Intentional attacks) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Lenoir with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

1. Claims 3, 11, 19, 46-47 and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lenoir et al. (hereinafter Lenoir) US 6,671,806 in view of Cox et al. "Some general methods for tampering with watermarks" IEEE, 1998, pages 1-15 and further in view of Tobias et al. WO 01/24530 (hereinafter Tobias).

As per claims 3, 11 and 19:



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The combination of Lenoir and Cox teaches all the subject matter as discussed above. None of the prior art explicitly disclose wherein the intervening comprises adjusting "play-rate" of the incoming stream. Tobias in analogous art, however, teaches wherein the intervening comprises adjusting "play-rate" of the incoming stream. (page 3, Summary of the Invention) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Lenoir and Cox with Tobias in order to encode streaming media by generating a plurality of versions of the digital content. (Abstract; Tobias)

As per claims 46 and 53:

Lenoir teaches a computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs a method for facilitating circumvention of watermark detection, the method comprising: determining where, in a processor-readable memory, a dynamic watermark detection program module ("watermark detector") receives a subject input stream for the watermark detector to perform watermark detection thereon to determine if the subject input stream has a watermark therein; and observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. Rhoads in analogous art, however, discloses observing and determining a location in a processor-readable memory of a computer the detector receives an input stream. (col. 1, lines 55-65; col.4, lines 2-18)

Lenoir fails to explicitly disclose intervening with clear reception of the subject input stream, thereby hindering detection by the watermark detector, wherein the

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intervening comprises adjusting "play-rate" of the input stream. Cox in analogous art, however, teaches intervening with clear reception of the subject input stream, thereby hindering detection by the watermark detector. (5. Signal Transformation and 6.

Intentional attacks) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Lenoir with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

Both references do not explicitly disclose wherein the intervening comprises adjusting "play-rate" of the incoming stream. Tobias in analogous art, however, teaches wherein the intervening comprises adjusting "play-rate" of the incoming stream. (page 3, Summary of the Invention) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Lenoir and Cox with Tobias in order to encode streaming media by generating a plurality of versions of the digital content. (Abstract; Tobias)

As per claims 47 and 54:

Lenoir teaches a method of facilitate circumvention of dynamic, robust, embedded signal detection, the method comprising: observing a dynamic embedded-signal detection program module ("dynamic detector) in a processor-readable memory of a computer configured to dynamically detect watermarks in an input stream, based upon observing, determining a location in a processor-readable memory, the location being where the dynamic detector receives a subject incoming stream for the dynamic

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detector to perform embedded-signal detection thereon to determine if the subject incoming stream has an embedded-signal therein. (col. 1, lines 55-65; col.4, lines 2-18)

Lenoir fails to explicitly disclose intervening with clear reception of the subject input stream, thereby hindering detection by the watermark detector, wherein the intervening comprises adjusting "consumption-rate" of the input stream. Cox in analogous art, however, teaches intervening with clear reception of the subject input stream, thereby hindering detection by the watermark detector. (5. Signal Transformation and 6. Intentional attacks) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Lenoir with Cox in order to examine to what extent a watermark can be resistant to tampering to a variety of possible attacks. (Cox Abstract)

Both references do not explicitly disclose wherein the intervening comprises adjusting "consumption-rate" of the incoming stream. Tobias in analogous art, however, teaches wherein the intervening comprises adjusting "consumption-rate" of the incoming stream. (page 3, Summary of the Invention;) Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the system disclosed by Lenoir and Cox with Tobias in order to encode streaming media by generating a plurality of versions of the digital content. (Abstract; Tobias)

### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEWAYE GELAGAY whose telephone number is (571)272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shewaye Gelagay/  
Examiner, Art Unit 2437

/Emmanuel L. Moise/  
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